

*I would like to note that the answers I provide below are my opinion as an individual and not as a representative of Harvard University.*

**Please describe how climate change affects the social determinants of health and the systemic and structural deficiencies of the current US approach to addressing climate change that have exacerbated health inequities in the US?**

*We know that vulnerable communities, people of color, and those with low socioeconomic status bear the brunt of the health impacts of climate change. For example, African-Americans breathe air that is over 40% more polluted than non-African Americans. We see higher rates of diseases like asthma, diabetes, and cardiovascular disease, all of which are further exacerbated by climate change, among communities of color. And other impacts on social determinants—displacement caused by more frequent extreme weather events, for example—are more likely in and more difficult for vulnerable families and communities. Thus, the lack of strong action to address climate change on the part of the American government is disproportionately harming already vulnerable communities and increasing disparities in health outcomes.*

**You have made a clear case that inaction on climate change will result in higher health risks, especially for seniors and children, and greater overall health care costs. You also argue that we are seeing much of this play out now. Supposing we take the necessary action on climate change in the next 30 years, what are some of the legislative solutions we will need to look at to mitigate the health-related damage already inflicted?**

*Currently the NIH spends 0.05 percent of its budget on studying the health effects of climate change. One key legislative step that needs to be taken to mitigate the health-related damage already inflicted is for our government to prioritize studying this issue by allocating funding that is aligned with the risk that climate change poses to the health of the American people. In order for us to make progress we need high quality data that allows us to better understand how best to mitigate the health effects of climate change.*

*We need legislative solutions that help hospitals and other healthcare providers climate proof their facilities (which can be expensive), and federal help will be particularly important for safety net providers.*

*Additionally, we need legislation that will help us better staff providers who will be caring for the additional health burdens caused by climate change, such as federally qualified health centers and others who disproportionately care for populations that are most affected by climate change.*

**Minorities, tribal communities, and low-income individuals face the greatest threats from climate change. For example, the American Lung Association has said that people of color may be more likely to live in areas that have higher air pollution from particulate matter. Based on your research, which policies do you think will be most effective at mitigating the effects of climate change while also prioritizing the health and wellbeing of disenfranchised communities?**

*Policies that reduce the burning of fossil fuels will be most effective at both mitigating the health effects of climate change and prioritizing the health and wellbeing of disenfranchised communities. Fossil fuels*

*from coal and automobile exhaust are major contributors to respiratory health issues in the United States and disproportionately effect the health of minority communities. One study from California found that on average, African American, Latino and Asians are exposed to more pollution from cars, trucks, and buses than white Californians. As noted above, African-Americans breathe air that is over 40% more polluted than non-African Americans. Another study found that African Americans and Latinos are bearing the weight of pollution far more than they are contributing to it. Instituting policies that reduce the burning of fossil fuels is essential to mitigating the health effects of climate change and will benefit the health of disenfranchised communities the most.*

**What climate change-related health concerns have patients brought up with you or your colleagues during their appointments? I know that some experts have noted some of the connections between climate change to patients' health in more intense heatwaves, more pollen, and longer allergy seasons. Have you or your colleagues taken steps, as a part of your practice, to formally talk with your patients about how climate change may be affecting their health?**

*Although patients may not always directly connect their health problems with climate change, I certainly see the impacts in my practice. I've seen more patients suffering repercussions related to extreme heat days, and I continue to see many patients with cardiovascular disease and stroke whose risk would increase due to climate change. My pediatrician colleagues have seen more children presenting with asthma. We know that climate change is linked to asthma, allergies, coronary heart disease, cardiovascular disease, stroke, and heat-related illness-- and as a physician, it's important to me that we take action to protect my patients from these health risks. I and my physician colleagues are helping patients connect the dots by discussing climate change so they better understand how it is affecting their health today and how they can best protect themselves from climate related health effects.*